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# BASIC TYPES OF SOVIET FISHING VESSELS

[Comment: This report describes the basic types of fishing vessels currently operating with the Soviet fishing fleet: trawlers, seiners, fishing boats, and fish transport and auxiliary boats.

The report does not attempt to describe all Soviet fishing vessels, which include many variations of the basic types. The prewar Soviet publication Al'bom Rybopromyslovykh Derevyannykh Sudov i Mekhanizmov (Album of Wood Fishing Ships and Machinery), Moscow, 1936, lists 139 variations of wood fishing craft alone, but even these fall into a few basic classifications. Such older vessels have not been included in this report, since the trend is toward more modern metal ships, and the older types are being replaced.

Illustrations (Figures 1-26) reproduced from the sources are appended. Numbers in parentheses refer to appended sources.]

### Trawlers

1. Large trawler (RT) (Figure 1)

Length -- up to 7Q meters Displacement -- up to 2,500 tons Main engine -- from 600 to 1,500 horsepower

All these vessels are equipped with powerful trawl winches, trawl gallows, roller chocks for bringing in the draglines, a salvaging installation for making meal of fish waste, a cooker for extracting codliver oil, and a pressure cooker for capning cod liver.

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Supplies of fuel and water allow the vessel to operate for 30-60 days.

The holds of this type rawler may be of four types:

- a. Salted, in which the fish are gutted, washed, and salted.
- b. Iced, in which ice and salt are both carried for preservation.
- c. Cooled, with a small cooling installation for reducing temperatures to a point which will permit extended preservation of fresh fish.
- d. Refrigerated, with a powerful refrigerating installation which will allow the freezing of fish and their transport in chilled holds.
  - 2. Medium fishing trawler (SRT) (Figure 2)

Length -- 38.5 meters
Beam -- 7.2 meters
Displacement -- 417 tons
Capacity of the hold for barreled fish -- 50 tons
Capacity of the hold for fresh fish -- 100 tons
Main engine -- 300 horsepower
Speed -- 9 knots

These vessels do not have preserving and salvage installations for meal processing. The trawling winches are less powerful than those of the RT and the trawls are smaller. Trawl gallows are usually fitted only on one side. The dead-weight tonnage does not exceed 100-150 tons.

These trawlers are also used for herring fishing, for which they are specially equipped.

3. Small fishing trawler (MRT) (Figure 3)

Length -- 24 meters
Beam -- 6.5 meters
Draft loaded -- 3.0 meters
Dead-weight tonnage -- 30 tons
Main engine -- 200 horsepower
Speed -- 9 knots

The MRT is equipped with two trawl gallows on one side. The trawl winches are operated from the main engine. It has two-way radio equipment and a partial sail rig.

## Seiners

1. Large seiner (RS) (Figure 4)

Length -- about 23 meters Beam (maximum) -- 6 meters Displacement -- 190 tons ' Dead-weight tonnage -- 50 tons Main engine -- 300 horsepower Speed -- 10 knots

The RS is equipped with three basic types of fishing equipment: trawl, basket seine, and drift nets. The ship is fitted with a trawling winch, trawling gallows, and a turntable.

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Because of the arrangement of the superstructure and deck equipment, such a seiner is called a single-platform vessel with one turntable located at

The RS-300-series large seiner (Figure 4a) is very seaworthy and is used for herring expeditions and for trips across the Northern Sea Route. (2)

[Comment: As indicated in the figures, these two RS ships have reversed deck and housing arrangements, although they are the same type of vessel.]

2. Medium fishing seiner (SRS) (Figure 5)

Length over-all -- 23 meters Beam over-all -- 5.2 meters Draft loaded -- 1.9 meters Dead-weight tonnage -- 30 tons Main engine -- 150 horsepower Speed -- 9 knots

This type of vessel is not equipped with trawling winch or trawl gallows and is intended for working with basket seine only.

Some of these ships are also equipped with seine-gathering machine and fish pumps.

The SRS illustrated (Figure 5) is of the "Kiyevlyanin" type and is a double-turntable vessel with turntables forward of the housing and at the stern. A special seining winch is located forward of the housing. (1)

The SRS-160 series of this type of vessel (Figure 6) is designed for operations in the 100-mile zone around Primor'ye, Sakhalin, Kamchatka, the Kurile Islands, the Okhotsk shore, the Black Sea, and the Caspian Sea.

Basically the ship is a basket seiner and is equipped with a seining winch, seine-gathering machine, and turntable. (2)

The Medium Black Sea Seiner (SChS) is a further variation of the medium seiner. Its basic specifications are as follows:

Length -- 25.63 meters
Beam -- 5.6 meters
Draft loaded, aft -- 2.38 meters
Capacity of the hold -- 47 cubic meters
Crew -- 12 men

The main engine of the vessel is a 150-horsepower 3D6 diesel. In the future, 160-horsepower engines will be installed. The ship also has two 20-horsepower 2MCh auxiliary diesels and a 13.5-kilowatt generator. The hold is

3. Small fishing seiner (MRS) (Figure 7)

Length over-all -- 16.5 meters Beam over-all -- 4.4 meters Dead-weight tonnage -- 8 tons Draft -- 1.2 meters Main engine -- 50-80 horsepower Speed -- 7.5 knots

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The MRS is equipped with basket seine, nets for small fish, and long lines. The ship has a special turntable for the basket seine, a seining winch, and a long-line machine. The ship is a single-turntable type with the turntable forward of the housing. MRS-type vessels operating in different areas may carry specialized equipment. For example, the Caspian type may have different equipment for those types operating in the Baltic or Black Sea. (1)

The MRS-80 series is designed for operating in the 20-mile zone around Primor'ye, Kamchatka, Sakhalin, the Kurile Islands, and the Okhotsk shore. (2)

The Caspian Wooden Seiner (Figure 8) is a special type, built for operations in the Caspian Sea. It has the following dimensions:

Length -- 18.7 meters
Beam -- 6.3 meters
Draft loaded -- 1.4 meters
Dead-weight tonnage -- 20 tons
Main engine -- 40 horsepower
Speed -- about 7 knots

The Caspian Seiner has a full-sail rig and fishes with drift nets and small basket seine. It has a drift capstan which operates from the main engine.

## Fishing Boats (RB)

There are many types of fishing boats, usually classified according to engine power into three broad categories (large, medium, or small) or by special equipment.

1. Large fishing boat (RB-80, also designated the Baltic Fishing Boat) (Figure 9)

Length -- 17.6 meters
Beam -- 4.92 meters
Draft loaded -- 1.87 meters
Dead-weight tonnage -- 9.5 tons
Main engine -- 80 horsepower
Speed -- 8 knots

The RB-80 is equipped for operations in the 20-mile zone along the Baltic Coast. The ship is equipped with a trawl, drift nets, trawling winch, gallows, and roller chocks. (1)

2. Medium fishing boat (SRB-40) (Figure 10)

The SRB is designed for operating in the 20-mile zone of the Far East and the Baltic Sca. It is equipped with long lines and nets. A long-line winch and a net-raising machine are installed on the ship. (2)

3. Small fishing boat (MRB-20)

The small fishing boats are of many types and specialties, and may be used for coastal operations or may work in open waters in conjunction with larger vessels.

a. "Dori" type (Figure 11)

Length -- 9.1 meters Beam amidships -- 2.8 meters

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Draft loaded -- 0.8 meter Displacement loaded -- 12 tons Engine -- 20 horsepower Speed -- 6 knots

A light, wooden craft which operates in the North Atlantic with large seiners.

b. "Felyuga" type (Figure 12)

Length -- 9.1 meters
Beam -- 2.8 meters
Draft loaded -- 0.9 meter
Dead-weight tonnage -- 5 tons
Engine -- 20 horsepower
Speed -- 6 knots

This craft operates in conjunction with larger vessels in shallow areas of the Azov and Black seas.

c. MB Dal'nevostochnyy (Figure 13)

Length -- 16 meters
Beam -- 3.42 meters
Draft loaded -- 0.9 meter
Dead-weight tonnage -- 8 tons
Engine -- 30 horsepower
Speed -- 6.5 knots
A wooden-hulled vessel for working with stationary or moving nets.

d. Stoyechnoye ship (Figure 14)

A type of small boat used for operations in the northern Caspian Sea over extensive shallow areas, such as around Astrakhan'.

Length -- 16-17 meters
Beam -- 4.9-5.8 meters
Draft -- 0.8-1.3 meters
Displacement loaded -- 32.6-46 tons
Sail area -- 94-100 square meters [lugger rigged]

[Comment: The word "stoyechnoye" usually designates a tender or auxiliary craft but this translation does not apply here.]

e. Reyushka (Figure 15)

A small, wooden sail vessel [lugger rigged] for operations in shallow areas of the northern Caspian Sea. It is 10 meters long, with a 2.8 meter beam, and a crew of 3. (1)

f. Motor seiner (Figure 15a)

Length -- 13.5 meters

Beam -- 4.3 meters

Depth amidships -- 1.2 meters

Length of the stern seine platform -- 5.0 meters

Draft loaded:

Forward -- 0.75 meter

Aft -- 0.75 meter

Displacement -- 10.0 tons

Speed -- 10-12 kilometers per hour

A new motor seiner developed in 1952 by the Astrakhan' Repair Shop.(3)

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# Fish-Transport and Auxiliary Boats

1. Motorybnitsa (Figure 16)

Small vessel used for fish transport in the northern Caspian Sea.

Length -- 18.7 meters
Beam -- 6.2 meters
Draft -- 1.26 meters
Dead-weight tonnage -- 30 tons
Engine -- 40 horsepower
Speed -- 6.5 knots

At present these ships are equipped with refrigerator installations for the shipment of fresh fish.

- 2. Pickup transport boats
  - a. "Tallinskoye" (Figure 17)

Length -- 13.8 meters
Beam -- 3.5 meters
Engine -- 40 horsepower
Speed -- 8 knots
Operating off the coast of the northwestern Baltic Sea.

b. Dub (Figure 18)

Transport vessel used in the Azov Sea. This vessel has long been in use and is now undergoing extensive design changes.

Length -- 19.2 meters Beam -- 5.8 meters Average draft -- 1.2 meters Dead-weight tonnage -- 40 tons

c. KD-20 or Far Eastern kungas (Figure 19)

A nonself-propelled craft used in the Kamchatka, Sakhalin, Okhotsk, and Primor'ye areas.

Length -- 19 meters
Beam -- 4.2 meters
Height -- 1.45 meters
Draft -- 1.1 meters
Dead-weight tonnage -- 20 tons

d. Lighter (Figure 20)

Length -- 15.8 meters
Beam -- 6.6 meters
Draft -- 0.65 meter
Dead-weight tonnage -- 20 tons
Used for hauling auxiliary cargoes both in river and maritime

e. PRN-150 pick-up ship (Figure 20a)

A special fish pick-up ship used in the Far East. The ship is equipped with two fish pumps, which operate from a 22-horsepower A-22 engine. (5)

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- 3. Tugs and tenders
  - a. Fishery tug (Figure 21)

Length -- 8 meters Beam -- 2 meters Average draft -- 0.55 meter Displacement -- 4 tons Engine -- 6 horsepower

Metal boat used for carrying seine workers during casting of river seines.

b. Net raiser (Figure 22)

Length -- 14.7 meters Beam -- 3.8 meters Draft loaded -- 1.3 meters Dead-weight tonnage -- 3 tons Engine -- 40 horsepower

This ship is used as a tender for stationary seines and for fishing with standing nets. Operates in the Gulf of Finland and Lake Ladoga.

c. River towing cutter "K-15" (Figure 23)

Length -- 15.5 meters Beam -- 3.1 meters Draft -- 0.65 meters Displacement -- 15.6 tons Engine -- 65 horsepower

Metal river tug for towing nonself-propelled craft. The cutter is equipped with a special winch at the stern which operates from the main shaft. The propeller is recessed in a stern tunnel, thus allowing the ship to enter very shallow areas without danger of propeller damage.

d. River tug "BR-40" (Figure 24)

Length -- 16.25 meters Beam -- 3.48 meters Draft -- 0.95 meter Displacement -- 21.25 tons Engine -- 40 horsepower This tug is designed for operation in river estuaries.

e. Ocean tug "Yakor" (Figure 25)

Length -- 17.45 meters Beam -- 3.8 meters Draft from the keel -- 1.25 meters Displacement -- 35 tons Engine -- 100 horsepower

An oceangoing metal tug used in the open roadsteads of fishing combines in the Far East.

f. Hunter ship (Figure 26)

A wooden ship, engine and sail rigged, of special construction for operating through ice. The hull is so designed that ice pressure will force the ship up onto the ice surface, thus avoiding nipping of the hull.

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The hunter ships intended for operation in the Far East are different from those used in the northern Caspian, since the former must navigate under more severe conditions.

The Far Eastern hunter ship has the following general dimensions:

Length -- 34 meters
Beam -- 7.06 meters
Maximum draft -- 3.40 meters
Displacement -- 434 tons
Dead-weight tonnage -- 150 tons
Engine -- 200 horsepower

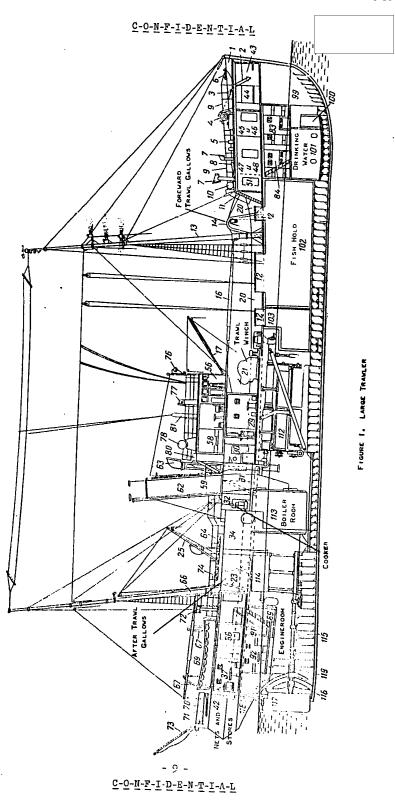
Newly designed hunter ships have up to 300-horsepower engines. The holds of this type of ship contain tanks which are loaded through holes in the deck. These may be used to transport fuel, as to a whaling base, or to carry products picked up from an operating base.

For hunting operations in ice the ship uses two sloops which are carried on deck. [These ships are used for hunting seal and other animals and may have holds equipped for transport of furs, etc., in place of tanks.]

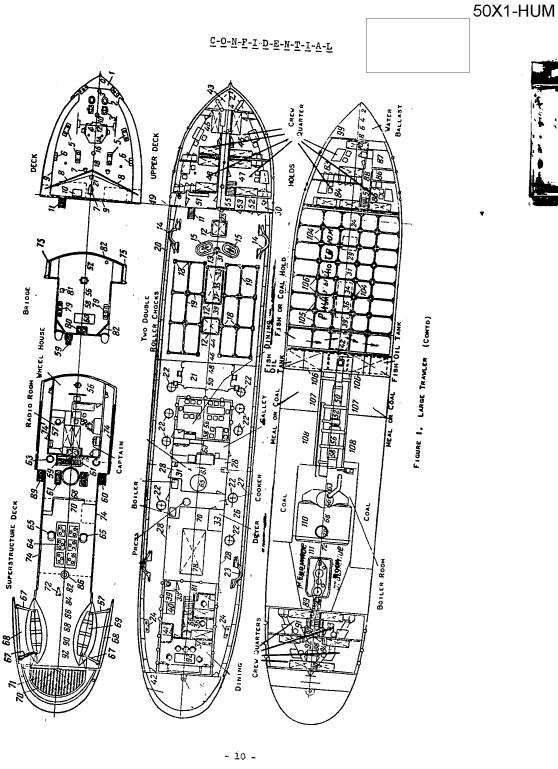
A new type of ship under this goveral category is the Tunny Ship, which is fitted with freezing equipment for tunny and special tanks for carrying live bait. These ships have powerful engines and a long operating range. (1)

[Appended figures follow:]





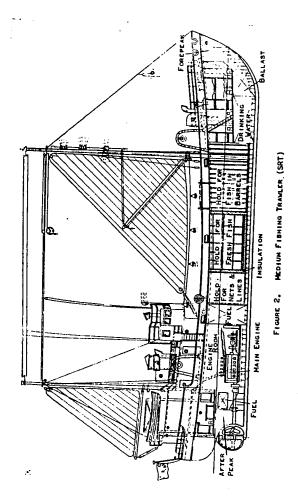
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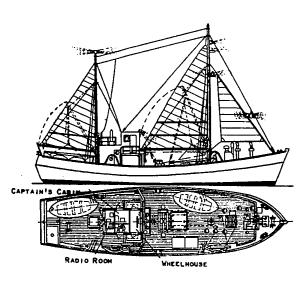


FIGURE 3. SMALL FISHING TRAVLER (MRT)

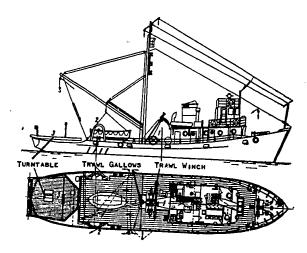


FIGURE 4. LARGE SEINER (RS)

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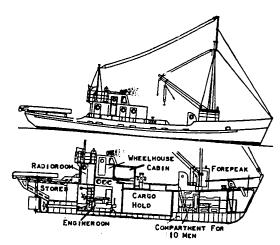


FIGURE 5. MEDIUM FISHING SEINER (SRS)-KIYEVLYANIN TYPE

[FIGURE 6 ON FOLLOWING PAGE.]

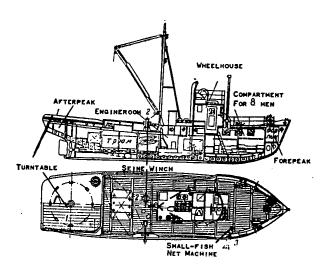


FIGURE 7. SMALL FISHING SEINER (MRS)

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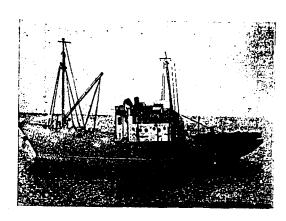


FIGURE 6. MEDIUM SEINER - SRS-160 SERIES

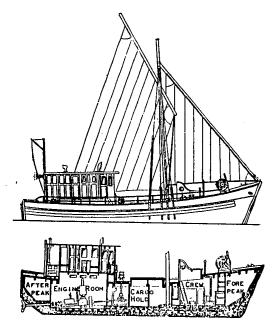


FIGURE 8. SHALL CASPIAN SEA WOODEN SEINER

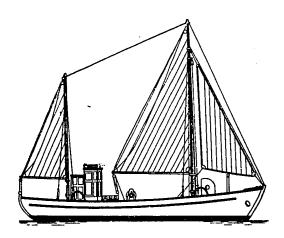
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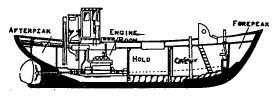


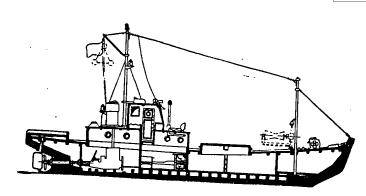
Figure 9. Large Fishing Boat (RBT-80 on Baltic Type)

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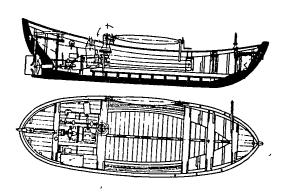
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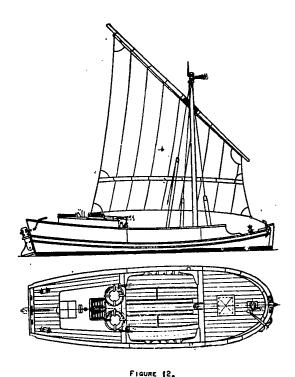


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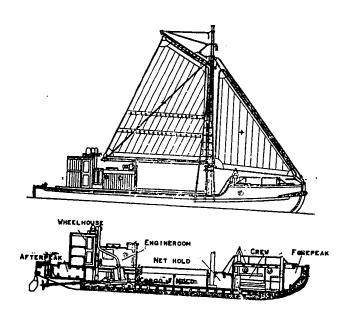


Figure 13. Fishing Boat-"MB Datinevostochnyy" Type

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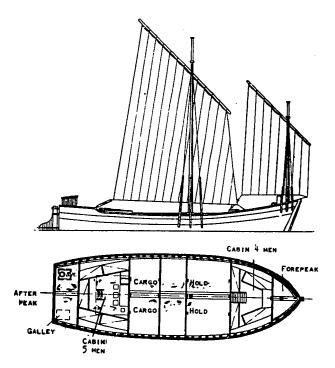


FIGURE 14. STOYECHNOYE SHIP

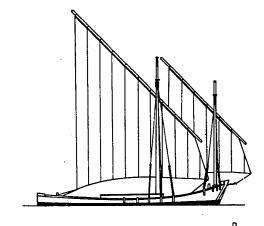
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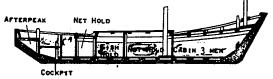


FIGURE 15. REYUSHKA

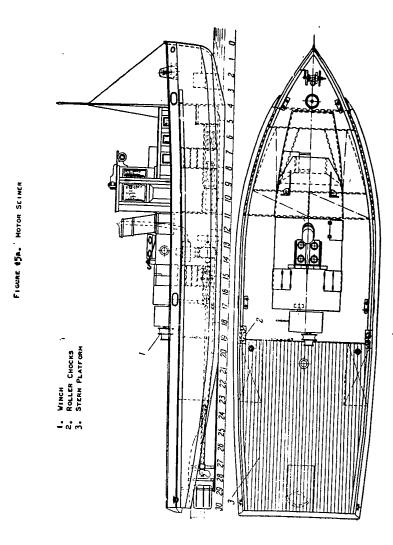
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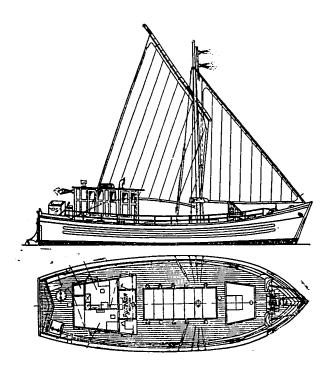
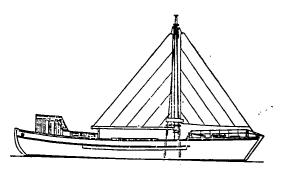


FIGURE 16.

 $\underline{C} - \underline{O} - \underline{N} - \underline{F} - \underline{I} - \underline{D} - \underline{E} - \underline{N} - \underline{T} - \underline{I} - \underline{A} - \underline{L}$ 

50X1-HUM





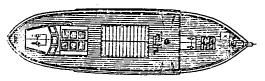
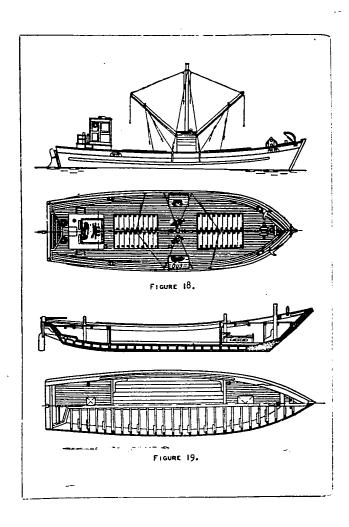


FIGURE 17.

- 23 -<u>C-O-N-F-I-D-E-N-T-I-A-L</u>  $\underline{\mathtt{C}} \underline{-\mathtt{O}} \underline{-} \underline{\mathtt{N}} \underline{-} \underline{\mathtt{F}} \underline{-} \underline{\mathtt{I}} \underline{-} \underline{\mathtt{D}} \underline{-} \underline{\mathtt{E}} \underline{-} \underline{\mathtt{N}} \underline{-} \underline{\mathtt{T}} \underline{-} \underline{\mathtt{I}} \underline{-} \underline{\mathtt{A}} \underline{-} \underline{\mathtt{L}}$ 

50X1-HUM



- 2<sup>1</sup>4 - <u>C-O-N-F-I-D-E-N-T-I-A-L</u>

 $\underline{C} - \underline{O} - \underline{N} - \underline{F} - \underline{I} - \underline{D} - \underline{E} - \underline{N} - \underline{T} - \underline{I} - \underline{A} - \underline{L}$ 

50X1-HUM

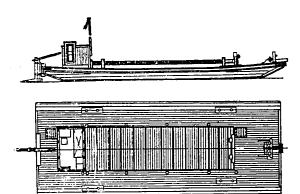
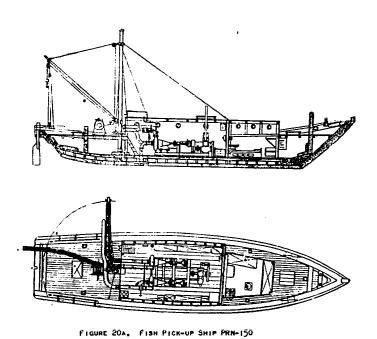


FIGURE 20. LIGHTER

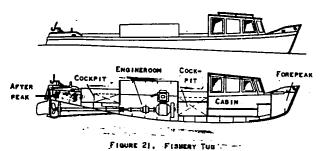


- 25 -<u>C-O-N-F-I-D-E-N-T-I-A-L</u>

 $\underline{\mathtt{C}} \underline{-} \underline{\mathtt{O}} \underline{-} \underline{\mathtt{N}} \underline{-} \underline{\mathtt{F}} \underline{-} \underline{\mathtt{I}} \underline{-} \underline{\mathtt{D}} \underline{-} \underline{\mathtt{E}} \underline{-} \underline{\mathtt{N}} \underline{-} \underline{\mathtt{T}} \underline{-} \underline{\mathtt{I}} \underline{-} \underline{\mathtt{A}} \underline{-} \underline{\mathtt{L}}$ 

50X1-HUM





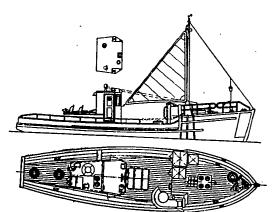


FIGURE 22. NET RAISER

- `26 -

 $\underline{\mathtt{C}} \underline{-} \underline{\mathtt{O}} \underline{-} \underline{\mathtt{N}} \underline{-} \underline{\mathtt{F}} \underline{-} \underline{\mathtt{I}} \underline{-} \underline{\mathtt{D}} \underline{-} \underline{\mathtt{E}} \underline{-} \underline{\mathtt{N}} \underline{-} \underline{\mathtt{T}} \underline{-} \underline{\mathtt{I}} \underline{-} \underline{\mathtt{A}} \underline{-} \underline{\mathtt{L}}$ 

 $\underline{\mathtt{C}} - \underline{\mathtt{O}} - \underline{\mathtt{N}} - \underline{\mathtt{F}} - \underline{\mathtt{I}} - \underline{\mathtt{D}} - \underline{\mathtt{E}} - \underline{\mathtt{N}} - \underline{\mathtt{T}} - \underline{\mathtt{I}} - \underline{\mathtt{A}} - \underline{\mathtt{L}}$ 

50X1-HUM



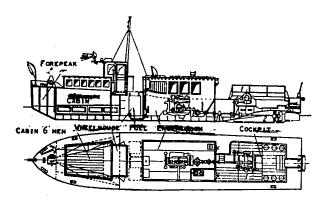


FIGURE 23. RIVER TOWING CUTTER "K-15"

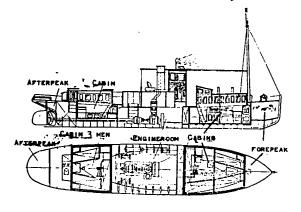


FIGURE 24. RIVER TUG "BR-40"

- 27 -<u>C-O-N-F-I-D-E-N-T-I-A-L</u>

 $\underline{\mathtt{C}} \underline{-} \underline{\mathtt{O}} \underline{-} \underline{\mathtt{N}} \underline{-} \underline{\mathtt{F}} \underline{-} \underline{\mathtt{I}} \underline{-} \underline{\mathtt{D}} \underline{-} \underline{\mathtt{E}} \underline{-} \underline{\mathtt{N}} \underline{-} \underline{\mathtt{T}} \underline{-} \underline{\mathtt{I}} \underline{-} \underline{\mathtt{A}} \underline{-} \underline{\mathtt{L}}$ 

50X1-HUM



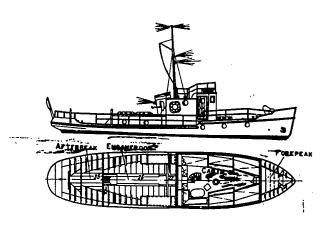
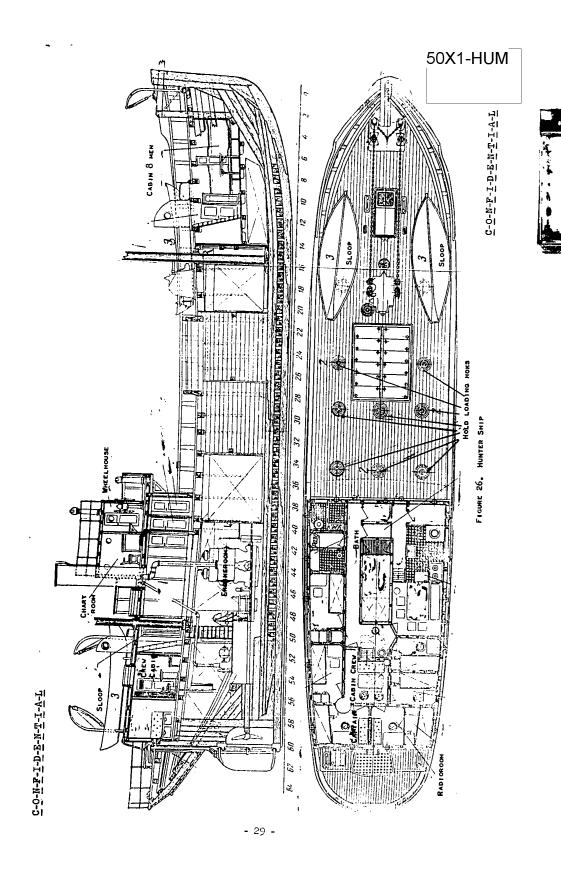


FIGURE 25. OCEAN TUG "YAKOR!" TYPE

- 28 -<u>C-O-N-F-I-D-E-N-T-I-A-L</u>



١.

 $\underline{\textbf{C-}\underline{\textbf{O}}} \cdot \underline{\textbf{N}} \cdot \underline{\textbf{F}} - \underline{\textbf{I}} - \underline{\textbf{D}} - \underline{\textbf{E}} - \underline{\textbf{N}} - \underline{\textbf{T}} - \underline{\textbf{I}} - \underline{\textbf{A}} - \underline{\textbf{L}}$ 

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- 3. Ibid., No 2, Feb 54

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- 4. Ibid., No 4, Apr 52
- 5. Tbid., No 1, Jan 50

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- 30 -